In the Claims:

1. **(Currently Amended)** A process of co-extrusion of a thin electrode sheet with a thin electrolyte polymer sheet directly onto a current collector sheet to form a bi-face assembly for a lithium polymer battery, said process comprising the steps of:

(a) mixing a polymer with electrochemically active material, lithium salt and electronic conductive material in a first mixing chamber to form a first electrode slurry;

(b) mixing a polymer with a lithium salt in a second mixing chamber to form a first electrolyte slurry;

(c) feeding said first electrode slurry through a first flow channel and said first electrolyte slurry through a second flow channel;

(d) mixing a polymer with electrochemically active material, lithium salt and electronic conductive material in a third mixing chamber to form a second electrode slurry;

(e) mixing a polymer with a lithium salt in a fourth mixing chamber to form a second electrolyte slurry;

(f) feeding said second electrode slurry through a third flow channel and said second electrolyte slurry through a fourth flow channel;

(g) extruding said first electrode slurry in the form of a first thin electrode sheet through a first slot die opening connected to said first flow channel directly onto a first side of a moving current collector sheet;

(h) concurrently extruding said first electrolyte slurry in the form of a first thin electrolyte sheet through a second slot die opening adjacent to said first die opening and connected to said second flow channel, said first thin electrolyte sheet being extruded directly onto said first thin electrode sheet;

(j) extruding said second electrode slurry in the form of a second thin electrode sheet through a third slot die opening connected to said third flow channel directly onto a second side of the moving current collector sheet;

(k) concurrently extruding said second electrolyte slurry in the form of a second thin electrolyte sheet through a fourth slot die opening adjacent to said third die opening and connected to said fourth flow channel, said second thin electrolyte sheet being extruded directly onto said second thin electrode sheet;

wherein, the moving current collector sheet is guided ~~passes~~ in between the first and third slot die openings and between the second and fourth slot die openings thereby forming a bi-face electrochemical assembly.

2. **(Canceled)**

3. **(Canceled)**

4. **(Previously Presented)** A process of co-extrusion as defined in claim 1 wherein said first thin electrode sheet and said first thin electrolyte sheet are extruded through a first slot die having a pair of flow channels and the first and second slot die openings and said second thin electrode sheet and said second thin electrolyte sheet are extruded through a second slot die having a pair of flow channels and the third and fourth slot die openings.

5. **(Previously Presented)** A process of co-extrusion as defined in claim 1 wherein said first and second thin electrode sheets and said first and second thin electrolyte sheets are extruded through a multiple slot die having four flow channels and four slot openings.

6. **(Previously Presented)** A process of co-extrusion as defined in claim 5 wherein said multiple slot die comprises a central channel adapted to guide said current collector between said four slot openings such that said first thin electrode sheet and said first thin electrolyte sheet are extruded on the first side of said moving current collector and said second thin electrode sheet and said second thin electrolyte sheet are extruded on the second side of said moving current collector.

7. **(Previously Presented)** A process of co-extrusion as defined in claim 1 wherein said first and second electrode sheets are extruded on the first and second side of said moving current collector respectively through a first slot die having a pair of flow channels and the first and third slot die openings and said first and second electrolyte sheets are extruded directly onto said first and second electrode sheets respectively through a second die having a pair of flow channels and the second and fourth slot die openings.

8. **(Previously Presented)** A process of co-extrusion as defined in claim 7 wherein said first slot die comprises a central channel adapted to guide said moving current collector

between said pair of flow channels such that a thin electrode sheet is extruded on both sides of said current collector.

9. **(Previously Presented)** A process of co-extrusion as defined in claim 8 wherein said second slot die comprises a central channel adapted to guide said moving current collector with said first and second electrode sheets between said pair of flow channels such that said first and second electrolyte sheets are extruded onto said first and second electrode sheets respectively on both sides of said moving current collector sheet.

10. **(Previously Presented)** A process of co-extrusion as defined in claim 1 wherein said first and second thin electrode sheets and said first and second thin electrolyte sheets are extruded through a first and second slot die located on each side of said moving current collector sheet, the first slot die having two flow channels and the first and second slot die opening respectively for extruding said first thin electrode sheet directly onto said moving current collector sheet and said first thin electrolyte sheet directly onto said first thin electrode sheet, the second slot die having two flow channels and the third and fourth slot die opening respectively for extruding said second thin electrode sheet directly onto said moving current collector sheet and said second thin electrolyte sheet directly onto said second thin electrode sheet.

11. **(Previously Presented)** A process of co-extrusion as defined in claim 1 wherein said first and second thin electrode sheets are extruded through a first pair of slot dies located on each side of said moving current collector sheet and said first and second thin electrolyte sheets are extruded through a second pair of slot dies located on each side of said moving current collector sheet.

12. **(Previously Presented)** A process of co-extrusion as defined in claim 1 further comprising means for adjusting the thickness of said first and second thin electrode sheets and the thickness of said first and second thin electrolyte sheets.

13. **(Previously Presented)** A process of co-extrusion as defined in claim 12 further comprising means for measuring said thickness of said first and second thin electrode sheets and said thickness of said first and second thin electrolyte sheets.

14. **(Original)** A process of co-extrusion as defined in claim 13 wherein said means for measuring is a measuring device selected from the group consisting of mechanical device, optical device, ultra-sonic device, Gamma gauge and Beta gauge.

15. **(Original)** A process of co-extrusion as defined in claim 13 further comprising an electronic control unit linked to said means for measuring said thickness and to said means for adjusting the thickness; said electronic control unit receiving measurement data from said means for measuring said thickness, comparing said received measurement data to pre-set thickness tolerances stored into memory and, when thickness measurement fall outside the preset tolerances, sending signals to said means for adjusting the thickness to effect adjustment of the extruded layers.

16. **(Canceled)**